U.S.S.N. 10/827,196

## IN THE CLAIMS

Please cancel claims 1-5, 7, 8, 10-15 and 17 without prejudice.

Please amend claims 6, 9, 16 and 18.

2

U.S.S.N. 10/827,196

**Listing of Claims**

Claims 1-5 (canceled)

6. (currently amended) ~~The pointing device as claimed in claim 5, wherein the first preset value is 0 and the second preset value is 0.~~ A pointing device with a locus smoothing function, comprising:

a locus processing circuit receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value, and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value, and the second directional displacement to yield the second directional accumulated value;

wherein when the accumulated value satisfies a preset condition that the first directional accumulated value is not equal to 0 and the second directional accumulated value is not

3

U.S.S.N. 10/827,196

equal to 0, the accumulated value is output to a processing

device for smoothing a locus of a pointer on a display device

and a reset procedure is executed to reset the accumulated

value.

Claims 7-8 (canceled)

9. (currently amended) ~~The pointing device as claimed in claim 8, wherein the first preset value is 0, the second preset value is 0, the third preset value is 2, the fourth preset value is 2, the fifth preset value is 4, and the sixth preset value is 4.~~ A

pointing device with a locus smoothing function, comprising:

a locus processing circuit receiving a digitized

displacement and executing an accumulation procedure to generate

an accumulated value of displacement, in which the digitized

displacement comprises a plurality of directional displacements

having at least a first directional displacement and a second

directional displacement, the accumulated value comprises a

plurality of directional accumulated values having at least a

first directional accumulated value and a second directional

accumulated value, and the accumulation procedure accumulates

the first directional displacement to yield the first

4

U.S.S.N. 10/827,196

directional accumulated value, and the second directional

displacement to yield the second directional accumulated value;

wherein when the accumulated value satisfies a preset

condition that the first directional accumulated value is not

equal to 0, the second directional accumulated value is not

equal to 0, and the first directional accumulated value is

greater than 2 or the second directional accumulated value is

greater than 2, wherein when the first directional accumulated

value is greater than 4 or the second directional accumulated

value is greater than 4, the accumulated value is output to a

processing device for smoothing a locus of a pointer on a

display device and a reset procedure is executed to reset the

accumulated value.

Claims 10-15 (canceled)

16. (currently amended) ~~The locus smoothing method as claimed~~ ~~in claim 15, wherein the first preset value is 0 and the second~~ ~~preset value is 0.~~ A locus smoothing method, appropriate for a

pointing device, comprising the steps of:

receiving a digitized displacement and executing an

accumulation procedure to generate an accumulated value of

displacement, in which the digitized displacement comprises a

5

U.S.S.N. 10/827,196

plurality of directional displacements having at least a first

directional displacement and a second directional displacement,

the accumulated value comprises a plurality of directional

accumulated values having at least a first directional

accumulated value and a second directional accumulated value,

and the accumulation procedure accumulates the first directional

displacement to yield the first directional accumulated value,

and the second directional displacement to yield the second

directional accumulated value; and

determining whether the accumulated value satisfies a

preset condition that the first directional accumulated value is

not equal to 0 and the second directional accumulated value is

not equal to 0, if so, the accumulated value is output to a

processing device for smoothing a locus of a pointer on a

display device and a reset procedure is executed to reset the

accumulated value.

17. (canceled)

18 (currently amended) ~~The locus smoothing method as claimed in claim 14,~~ A locus smoothing method, appropriate for a pointing device, comprising the steps of:

6

U.S.S.N. 10/827,196

receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value, and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value, and the second directional displacement to yield the second directional accumulated value; and

determining whether the accumulated value satisfies a preset condition ~~wherein the preset condition requires~~ that the first directional accumulated value is not equal to a first preset value, the second directional accumulated value is not equal to a second preset value, and the first directional accumulated value is greater than a third preset value or the second directional accumulated value is greater than a fourth preset value, wherein before the step of determining whether the

7

U.S.S.N. 10/827,196

accumulated value satisfies a preset condition, the method further comprises the step of:

determining whether the first directional accumulated value is greater than a fifth preset value or the second directional accumulated value is greater than a sixth <u>preset</u> value, if so, the accumulated value is output to the processing device for smoothing ~~the~~ <u>a</u> locus of ~~the~~ <u>a</u> pointer on ~~the~~ <u>a</u> display device and ~~the~~ <u>a</u> reset procedure is executed to reset the accumulated value.

19. (previously presented)   The locus smoothing method as claimed in claim 18, wherein the first preset value is 0, the second preset value is 0, the third preset value is 2, the fourth preset value is 2, the fifth preset value is 4, and the sixth preset value is 4.

20. (previously presented)   The locus smoothing method as claimed in claim 18, wherein the reset procedure resets the first directional accumulated value to 0 and the second directional accumulated value to 0.